



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,281	07/19/2001	Peter Robert Foley	CM2492	2076
27752	7590	04/22/2004	EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			DEL COTTO, GREGORY R	
			ART UNIT	PAPER NUMBER
			1751	
DATE MAILED: 04/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,281

Applicant(s)

FOLEY ET AL.

Examiner

Gregory R. Del Cotto

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-68 and 72-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-68 and 72-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 51-68 and 72-91 are pending. Applicant's amendments are arguments filed 3/29/04 have been entered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/29/04 has been entered.

Objections/Rejections Withdrawn

The following objections/rejections set forth in the Office action mailed have been withdrawn:

The rejection of claims 51-61, 63-68- 70-72, 74-79, 81-85, and 87 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Feng (US 5,929,007) has been withdrawn.

The rejection of claims 62, 69,73, and 80 under 35 U.S.C. 103(a) as being unpatentable over Feng (US 5,929,007) has been withdrawn.

The rejection of claims 88-91 under 35 U.S.C. 103(a) as being unpatentable over Feng (US 5,929,007) as applied to claims 51-85 and 87 above, and further in view of Trinh et al (US 6,001,789) has been withdrawn.

The rejection of claim 86 under 35 U.S.C. 103(a) as being unpatentable over Feng (US 5,929,007) as applied to claims 51-85 and 87 above, and further in view of Ofosu-Asante (US 5,739,092) has been withdrawn.

The rejection of claims 51-91 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 23-28 of 09/909233, claims 22-27 of 09/909288, claims 1-26, 32, and 33 of 10/109344, claim 16 of 10/197029, and claims 14-20, 22, and 23 of 10/253113 has been withdrawn due to the filing of a terminal disclaimer.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application PCT/US00/34906, filed 12/21/00, PCT/US00/19619, filed 7/19/00, and PCT/US00/20255, filed 7/25/00. It is noted, however, that while applicant appears to have filed certified copies of the applications as required by 35 U.S.C. 119(b), these certified copies have not been placed in the file. Thus, priority has not been granted and it is requested that applicant refile certified copies of the above-listed documents.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 51-68 and 72-91 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

Art Unit: 1751

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, provides no basis for "wherein the composition is free of liquid hydrocarbons" as not recited by the instant claims. It appears that, upon cancellation of this subject matter, the prior art rejection using Kacher (US 5,891,836) previously made will be reinstated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Art Unit: 1751

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al (US 5,102,573).

Han et al teach liquid caustic-free, pre-spotting compositions that remove baked-on food residues from hard surfaces at ambient temperatures which comprise from 1 to 40% of a surfactant selected from the group consisting of anionic surfactants, nonionic surfactants and mixtures thereof; from about 1 to 10% of a builder selected from the group consisting of polyphosphates, pyrophosphates, citrates, carbonates, and mixtures thereof; from about 0.2% to 2% of an amine selected from the group consisting of monoethanolamine, diethanolamine, triethanolamine, and mixtures thereof; water; and further comprising from about 3 to 50% of a solvent, which solvent is selected from the groups consisting of propylene glycol monomethyl ether acetate, dipropylene glycol monomethyl ether acetate, diethylene glycol monobutyl ether, ethylene glycol monobutyl ether, etc. See Abstract. Note that, the Examiner asserts that propylene glycol monomethyl ether acetate would fall under the category of limited water miscible solvent as recited by the instant claims. Additionally, when it is desired to use a thickening, thixotropic, or pseudo-plastic agent with the compositions of the invention, any such agent, or mixture of two or more thereof, which is compatible with the ingredients of these formulations may be used. Additional suitable foam boosters and foam stabilizers include cocomonoethanolamide, etc. See column 11, lines 30-60.

Note that, with respect to the pH and the other physical parameters of the composition as recited by the instant claims, the Examiner asserts that the broad teachings of Han et al would encompass compositions having the same physical

parameters of the composition as recited by the instant claims because Han et al teach compositions containing the same components in the same proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a cleaning composition having the specific physical parameters containing an organoamine, a water-miscible solvent, a limited water-miscible solvent, a surfactant, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of Han et al suggest a cleaning composition having the specific physical parameters containing an organoamine, a water-miscible solvent, a limited water-miscible solvent, a surfactant, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al (US 5,102,573) as applied to claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87 above, and further in view of Nicholson et al (US 5,741,767).

Han et al are relied upon as set forth above. However, Han et al do not specifically teach the use of smectite clays in addition to the other requisite components of the composition as recited by the instant claims.

Nicholson et al teach a warewashing composition for a machine dishwasher. The composition comprises an effective amount of an organic peroxy acid and an amylase enzyme. See Abstract. Additionally, the detergent compositions contain a

surfactant. See column 6, line 50 to column 10, line 45. Additionally, thickeners can be used such as smectite clays.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use smectite clay in the detergent composition taught by Han et al, with a reasonable expectation of success, because Nicholson teach a similar cleaning composition which employs smectite clays as thickeners and further, Han et al teach the use of thickening agents in general.

Claims 88-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al as applied to claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87 above, and further in view of Trinh et al (US 6,001,789).

Han et al are relied upon as set forth above. However, Han et al do not specifically teach the use of ionone perfumes, musk, or cyclodextrin in addition to the other requisite components of the composition as recited by the instant claims.

Trinh et al teach a cleaning composition in which a perfumes including ionones and musks are absorbed into a cyclodextrin carrier material to form complexes. See abstract and col. 7, line 35 to col. 12, line 55.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a perfume-cyclodextrin complex in the cleaning composition taught by Han et al, with a reasonable expectation of success, because Trinh et al teach the use of a perfume-cyclodextrin complex a similar cleaning composition and further, Han et al teaches the use of perfumes in general.

Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al (US 5,102,573) as applied to claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87, and further in view of Ofosu-Asante (US 5,739,092).

Han et al are relied upon as set forth above. However, Han et al do not teach the use of a divalent cation in addition to the other requisite components of the composition as recited by instant claim 86.

Ofosu-Asante teaches liquid or gel dishwashing detergent compositions containing alkyl ethoxy carboxylate surfactant, calcium or magnesium ions, etc. See Abstract. The presence of calcium or magnesium ions improves the cleaning of greasy soils for compositions, manifest mildness to the skin, and provide good storage stability. See column 6, lines 40-55.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a magnesium or calcium ion(s) in the cleaning compositions taught by Han et al, with a reasonable expectation of success, because Ofosu-Asante teaches the advantageous properties imparted to a similar hard surface cleaner when using magnesium and/or calcium ions.

Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al as applied to claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87 above, and further in view of Feng et al (US 5,929,007).

Han et al are relied upon as set forth above. However, Han et al do not teach the use of propylene glycol butyl ether as recited by instant claim 65.

Feng teaches alkaline aqueous hard surface cleaning compositions which exhibit good cleaning efficacy against hardened dried or baked on greasy soil deposits. The compositions comprise 0.01 to 0.85% by weight of amine oxide, 0 to 1.5% by weight of chelating agent, 0.01% to 2.5% by weight of caustic, 3% to 9% by weight of glycol ether solvent system comprising one glycol ether or glycol ether acetate solvent having a solubility in water of not more than 20% by weight water and a second glycol ether or glycol ether acetate having a solubility of approximately 100% by weight wherein the ratio of the former to the latter is from 0.5:1 to 1.5:1, 0 to 5% by weight of a water-soluble amine containing organic compound, 0 to 2.5% by weight of a soil anti-redeposition agent, and 0 to 2.5% of optional constituents. See Abstract. The caustic agent is present in the compositions to ensure that the overall pH of the compositions is at least 11.5 or greater. Suitable solvents which exhibit a solubility in water of approximately 100% by weight include diethylene glycol n-butyl ether. See column 4, lines 20-65. The compositions preferably include a soil antiredeposition agents which may be synthetic hectorite, colloidal silica, etc. See column 5, lines 50-69. Another desirable additive is a thickening agent such as those based on alginates and gums including xanthan gum. See column 6, lines 5-40. Suitable solvents which have limited water-solubility include propylene glycol n-butyl ether acetate, propylene glycol methyl ether acetate, propylene glycol n-butyl ether, etc. See column 4, lines 35-69 and column 9, line 55-69.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use propylene glycol butyl ether in the cleaning composition

taught by Han et al, with a reasonable expectation of success, because Feng et al teach the equivalence of propylene glycol methyl ether acetate to propylene glycol n-butyl ether in a similar cleaning composition and, further, Han et al teach the use of propylene glycol methyl ether acetate.

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al (US 5,102,573) as applied to claims 51-56, 58-64, 66-68, 72-79, 81-85, and 87 above, and further in view of Kacher et al (US 5,891,836).

Han et al are relied upon as set forth above. However, Han et al do not teach the use of amine oxide surfactants as recited by the instant claims.

Kacher teaches light-duty liquid or gel dishwashing detergent compositions containing six essential which are a certain type of anionic surfactant, certain nonionic surfactants, certain suds boosters/stabilizers, an aqueous liquid carrier, a liquid hydrocarbon and a glycol ether microemulsion-forming solvent. See column 3, lines 15-30. Suitable suds boosters include amine oxide semi-polar nonionic surfactants, C8-C22 alkyl polyglycosides, etc. See column 5, line 50 to column 6, lines 69. Suitable microemulsion forming solvents include diethylene glycol monobutyl ether, propylene glycol monomethyl ether, dipropylene glycol monobutyl ether, etc. See column 8, lines 35-69. Additionally, optional ingredients include a thickener, calcium and/or magnesium ions, etc. See column 9, lines 25-69. Suitable thickeners include hydroxypropyl methylcellulose, etc. Suitable optional ingredients include perfumes, dyes, etc. See column 12, lines 1-20. The dishwashing compositions have pH of from about 4 to about 11. Additionally, buffering agents can be used in the compositions at levels from about

0.1% to 15% and include monoethanolamine, triethanolamine, etc. See column 12, lines 1-56.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use an amine oxide surfactant in the cleaning composition taught by Han et al, with a reasonable expectation of success, because Kacher teaches the use of amine oxides as suds boosters and further, Han et al teach the use of foam boosters in general.

Response to Arguments

Note that, the Declaration filed under 37 CFR 1.132 is sufficient to overcome the prior art rejections over Feng et al previously established. Applicant has provided evidence in the form of a Declaration filed under 37 CFR 1.132 which shows that the compositions of Feng have a surface tension of greater than 24.5 mN/m whereas the compositions as recited by the instant claims have a surface tension of less than 24.5 mN/m. Thus, the Declaration filed under 37 CFR 1.132 establishes that the compositions of Feng have a different surface tension than the compositions as recited by the instant claims. Additionally, nothing in Feng would point, direct, or motivate one of ordinary skill in the art to formulate compositions having a surface tension of less than 24.5 mN/m.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

Art Unit: 1751

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 51-68 and 72-91 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-40 of U.S. Patent No. 6,683,036. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-40 of U.S. Patent No. 6,683,036 encompass the material limitations of the instant claims.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.


Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

Art Unit: 1751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
April 15, 2004